

## CLAIMS

- 1 1. A method comprising:  
2 generating a control signal from a composite data enable signal; and  
3 separating a composite data signal into a video data signal and an auxiliary data signal  
4 using the control signal.
- 1 2. The method of claim 1 further comprising:  
2 indicating a capability to process the composite data signal.
- 1 3. The method of claim 1 further comprising:  
2 receiving an encoded data signal; and  
3 decoding the encoded data signal into the composite data enable signal and the composite  
4 data signal.
- 1 4. The method of claim 1 further comprising:  
2 determining whether the auxiliary data signal contains an error.
- 1 5. The method of claim 4 wherein the auxiliary data signal contains an error, further  
2 comprising:  
3 correcting the error in the auxiliary data signal.
- 1 6. An apparatus comprising:  
2 a control device to generate a control signal from a composite data enable signal; and  
3 a demultiplexor to separate a composite data signal into a video data signal and an  
4 auxiliary data signal using the control signal.
- 1 7. The apparatus of claim 6 further comprising:

2 an indicator to indicate a capability to process the composite data signal.

1 8. The apparatus of claim 6 further comprising:

2 a decoder to receive an encoded data signal, and to decode the received data signal into  
3 the composite data enable signal and the composite data signal.

1 9. The apparatus of claim 6 further comprising:

2 an error detector to determine whether the auxiliary data signal contains an error.

1 10. The apparatus of claim 9, further comprising:

2 an error corrector to correct an error in the auxiliary data signal.

1 11. An apparatus comprising:

2 means for generating a control signal from a composite data enable signal; and

3 means for separating a composite data signal into a video data signal and an auxiliary  
4 data signal using the control signal.

1 12. The apparatus of claim 11 further comprising:

2 means for indicating a capability to process the composite data signal.

1 13. The apparatus of claim 11 further comprising:

2 means for receiving an encoded data signal; and

3 means for decoding the received data signal into the composite data enable signal and the  
4 composite data signal.

1 14. The apparatus of claim 11 further comprising:

2 means for determining whether the auxiliary data signal contains an error.

1 15. The apparatus of claim 14 further comprising:

2 means for correcting an error in the auxiliary data signal.

1 16. A method comprising:

2 generating a control signal from a video data enable signal and an auxiliary data enable  
3 signal; and

4 combining an auxiliary data signal and a video data signal into a composite data signal  
5 using the control signal.

1 17. The method of claim 16 further comprising:

2 receiving an indication signal to indicate a capability to process the auxiliary data signal;  
3 and

4 generating an auxiliary data permitted signal to permit the auxiliary data signal to be  
5 combined with the video data signal in response to the indication signal.

1 18. The method of claim 16 further comprising:

2 generating a composite data enable signal from the video data enable signal and the  
3 auxiliary data enable signal;

4 encoding the composite data signal and the composite data enable signal into an encoded  
5 data signal; and

6 transmitting the encoded data signal.

1 19. The method of claim 16 further comprising:

2 adding error detection data to the auxiliary data signal.

1 20. The method of claim 19 further comprising:

2 adding error correction data to the auxiliary data signal.

1 21. A transmitter for transmitting video data and auxiliary data comprising:

2 a transmitter control logic device having an input to receive an auxiliary data enable  
3 signal and an input to receive a video data enable signal, the transmitter control logic device to  
4 generate a control signal using the auxiliary data enable signal and the video data enable signal,  
5 and to combine the auxiliary data enable signal and the video data enable signal into a composite  
6 data enable signal; and

7 a multiplexer having an input to receive an auxiliary data signal, an input to receive a  
8 video data signal, and an input to receive the control signal from the transmitter control logic  
9 device, the multiplexer to combine the auxiliary data signal and the video data signal into a  
10 composite data signal in response to the control signal.

1 22. The transmitter of claim 21 further comprising:

2 an encoder having an input to receive the composite data enable signal and an input to  
3 receive the composite data signal, the encoder to encode the composite data enable signal and the  
4 composite data signal into an encoded data signal and to transmit the encoded data signal.

1 23. The transmitter of claim 21 further comprising:

2 an auxiliary data control logic device having an input to receive a display property signal  
3 indicating that auxiliary data can be processed, the auxiliary data control logic device to generate  
4 an auxiliary control signal in response to the display property signal, the auxiliary control signal  
5 to control the reception of the auxiliary data enable signal by the transmitter control logic device  
6 or to control the reception of the auxiliary data signal by the multiplexer.

1 24. The transmitter of claim 21 further comprising:

2 a packet formatting logic device having an input to receive the auxiliary data signal, the  
3 packet formatting logic device to format the auxiliary data signal to include error detection and  
4 correction and to output the auxiliary data signal including the error detection and correction data  
5 to the multiplexer.

1 25. A receiver for receiving video data and auxiliary data comprising:

2 a receiver control logic device having an input to receive a composite data enable signal,  
3 the receiver control logic device to separate the composite data enable signal into an auxiliary  
4 data enable signal and a video data enable signal, and to generate a control signal using the  
5 composite data enable signal; and

6 a demultiplexer having an input to receive a composite data signal and an input to receive  
7 the control signal from the receiver control logic device, the demultiplexer to separate the  
8 composite data signal into an auxiliary data signal and a video data signal based on the control  
9 signal.

1 26. The receiver of claim 25 further comprising:

2 a decoder having an input to receive an encoded data signal, the decoder to decode the  
3 encoded data signal into a composite data signal and a composite data enable signal.

1 27. The receiver of claim 25 further comprising:

2 a display property device to output a display property signal to indicate that the receiver  
3 can process auxiliary data.

1 28. The receiver of claim 25 further comprising:

an error detection and correction logic device having an input to receive the auxiliary data signal from the demultiplexer, to determine whether the auxiliary data signal contains an error, and if the auxiliary data signal contains an error, to correct the error.

29. A method comprising:

receiving a composite data enable signal having a first data enable pulse and a second data enable pulse;  
determining a first duration corresponding to the first data enable pulse;  
determining a second duration corresponding to the second data enable pulse; and  
identifying a video data enable signal and an auxiliary data enable signal based on the first and second durations.

30. The method of claim 29 wherein identifying further comprises determining which duration is longer.

31. The method of claim 30 wherein the video data enable signal is identified by the longer duration.

32. The method of claim 29 further comprising:

receiving a composite data signal; and  
separating the composite data signal into a video data signal and an auxiliary data signal based on the video data enable signal and the auxiliary data enable signal.

33. A method comprising:

receiving a composite data enable signal having a pulse;  
determining a duration of the pulse;

identifying a video data enable signal in the pulse based on the duration; and

identifying an auxiliary data enable signal in the pulse based on the duration.

34. The method of claim 33 further comprising:

receiving a composite data signal;

identifying a video data signal in the composite data signal using the video data enable

signal; and

identifying an auxiliary data signal in the composite data signal using the auxiliary data

enable signal.